

CLAIMS

1. A process for the cleaning of a towed (9) seismic streamer (1, 6) characterised in that a cleaning appliance (11) including a tool (24, 32) for cleaning the seismic streamer (1), in addition to a hydrodynamic drag structure (33), is engaged around the seismic streamer (1), and in that the seismic streamer is then towed so that the drag created by the structure (33) has the effect of moving the cleaning appliance along the length of the seismic streamer.
2. A cleaning process according to claim (1), in which the speed of movement of the appliance along the seismic streamer is located in a range of between 0.5 and 2.5 metres per second.
3. An appliance (11) for the cleaning of an immersed or floating seismic streamer (1, 6), characterised in that it includes:
- a tool (24, 32) for cleaning the seismic streamer,
  - resources (25, 26) for positioning and guidance of the appliance along the length of the seismic streamer,
  - resistant resources (33) which, when the streamer is towed, create a hydrodynamic drag that is sufficient to overcome the friction forces and allow the cleaning appliance to move along the length of the seismic streamer (1, 6).
4. A cleaning appliance according to claim 3, which includes the drive resources to operate the cleaning tool by movement of the appliance along the seismic streamer.
5. A cleaning appliance according to claim (4) in which the cleaning tool includes at least 2 brushes, each brush being driven by a rotating roller (30) driven by friction against the seismic streamer (1, 6).
6. A cleaning appliance according to any of claims 3 to 5, which includes a blade (24) for removal of the incrustations attached to the seismic streamer (1, 6).

7. A cleaning appliance according to any of claims 3 to 6 in which the positioning guidance devices of the appliance in relation to the streamer consist of a pair – and preferably several pairs – of wheels, rollers, runners, or pulleys (25, 26), to roll or slide at low friction, respectively on two approximately diametrically opposite portions of the outer tubular surface of the seismic streamer.

8. A cleaning appliance according to any of claims 3 to 7 which also includes buoyancy resources (21, 22) in order to allow the cleaning appliance to maintain an approximately constant position during its passage along the length of the towed streamer, and therefore an approximately constant tilt in relation to the longitudinal axis (12) of the streamer, and to enable the cleaning appliance to present an approximately zero buoyancy in order not to interfere with the balance of the streamer.

9. A cleaning appliance according to any of claims 3 to 8 in which the resistant resources consist of two drag structures (33) in the form of a throat, funnel, deflector or water sock, of approximately identical shape and dimensions, positioned symmetrically in relation to a central front-to-back plane (13) and/or in relation to the guidance axis (14).

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10. A cleaning appliance according to any of claims 3 to 9 which includes a drag structure (33) and resources (54, 55) for adjustment of the drag coefficient of the structure (33).

11. A cleaning appliance according to any of claims 3 to 10, which includes the means (46, 48, 70) for suspension of resources (25, 26) in relation to the chassis (15) of the cleaning appliance.